



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/712,045	11/14/2003	Li-Duan Tsai	3313-1056P	9218
2292	7590	05/05/2006	EXAMINER	
BIRCH STEWART KOLASCH & BIRCH			VIJAYAKUMAR, KALLAMBELLA M	
PO BOX 747			ART UNIT	PAPER NUMBER
FALLS CHURCH, VA 22040-0747			1751	

DATE MAILED: 05/05/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/712,045

Applicant(s)

TSAI ET AL.

Examiner

Kallambella Vijayakumar

Art Unit

1751

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 14 November 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-22 is/are rejected.
- 7) ☒ Claim(s) 9 and 20 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

Art Unit: 1751

### **DETAILED ACTION**

Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Claims 1-22 are currently pending with the application.

The examiner has considered the IDS filed 11/14/2003.

### ***Claim Objections***

Claims 9 and 20 are objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. Claim-9 recites the limitation of an oxidant solution as a separate entity that is broader than the limitation of claim-1 from which it depends on containing a solution mixture of components. Claim-20 recites a method using an oxidant solution as a separate entity that is broader than the limitation of claim-12 from which it depends on containing a solution mixture of components.

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 9 and 20 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding the claim-9, it recites the composition of an oxidant solution, while the claim-1 from which it depends on recites a single mixture and it is not clear whether two solutions are mixed forming a mixture just before use in claim-1 or it is a single mixture.

Art Unit: 1751

Regarding the claim-20, it recites the composition of an oxidant solution, while the claim-12 from which it depends on recites a process using a single mixture and it is not clear whether two solutions are mixed forming a mixture just before use in claim-12 or it is a single mixture.

The examiner construes it to be a single mixture in claims 1 and 12 for the purposes of the examination.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

1. Claims 1-2, 6-8 and 10-11 are rejected under 35 U.S.C. 102(b) as being anticipated by Naarmann et al. (US 5,174,867).

The use of phrase “for preparing ...capacitor” in the claim-1 has not been treated with patentability. A recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim. In a claim drawn to a process of making, the intended use must result in a manipulative difference as compared to the prior art. See *In re Casey*, 152 USPQ 235 (CCPA 1967) and *In re Otto*, 136 USPQ 458, 459 (CCPA 1963).

Naarmann et al teach composition for forming conductive polymers comprising **pyrrole monomer**, heterocyclic compounds such as **imidazole**, compounds such as **toluenesulfonic acid**, finely divided carrier particles, solvents such as ethanol, **acetone and water** and oxidizing agent such as **persulfate**. The composition contained 1-10 parts of imidazole per 10 parts of pyrrole (Col-1, Ln 37-39,

Art Unit: 1751

59-62; Col-2, Ln 6-14; 25; 30-33; 40-45). Regarding the stability of the mixture in claim-1, lines 5-8, prior art composition is identical to that by the applicants and identical compositions have identical properties.

All the limitations of the instant claims are met.

The reference is anticipatory.

2. Claims 1-8, 10-16, 18-19 and 21-22 are rejected under 35 U.S.C. 102(b) as being anticipated by Lessner et al (US 6,001,281).

Lessner et al teach a composition of stabilized conductive polymer precursor solution comprising a monomer such as 3,4-ethylenedioxythiophene, an oxidizing agent such as Fe(III) tosylate, a solvent such as 2-propanol, and pyridine <retardant> <Example 1E>, and a method of making a capacitor by dipping the pellets in the precursor solution and heating the solution (Col-1, Ln 54-55; Col-2, Ln 3-16; Ln 44-45; Ln 56-68; Col-3, Ln 1-15; Col-6, Example-1, Table-1; Col-5, Ln 62-64). The prior art further teaches the addition of perchlorates and toluenesulfonic acid in the composition. Regarding the stability of the mixture in claim-1, lines 5-8, prior art composition is identical to that by the applicants and identical compositions have identical properties. The ratio of the components meets the ratio limitations in the claims 10 and 21. All the limitations of the instant claims are met.

The reference is anticipatory.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Art Unit: 1751

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

1. Claim 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lessner et al (US 6,001,281).

The disclosure by Lessner et al on the composition of stabilized conductive polymer precursor solution and the method of making the capacitor as set forth in rejection-2 under 35 USC 102(b) is herein incorporated. The prior art further teaches the stability of the precursor solution near ambient temperatures.

The prior art fails to teach the addition of specific polymerization retardant per the claim. However, the prior art discloses the addition of non-volatile organic base such as imidazole to inhibit the polymerization of the monomer mixture (Col-3, Ln 3-5).

It would have been obvious to a person of ordinary skill in the art to add imidazole to the precursor solution of Lessner with reasonable expectation of success, because such an addition is well known in the art at the time of the disclosure of the invention by the applicants (See, Matsumoto et al, JP 06-112094, Abstract), and the prior art is concerned about the stability of the precursor solution.

Art Unit: 1751

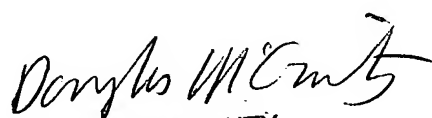
**Conclusion**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kallambella Vijayakumar whose telephone number is 571-272-1324. The examiner can normally be reached on 8.30-6.00 Mon-Thu, 8.30-5.00 Alt Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Douglas McGinty can be reached on 571-272-1029. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

KMV  
April 27, 2006.

  
DOUGLAS MCGINTY  
SUPERVISORY PATENT EXAMINER

1751